
Strengthening Inclusive Education through CSR-Based Community Service Programs: Enhancing Teacher Capacity and School Accessibility

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ABSTRACT

This community service (PkM) program aims to strengthen the implementation of inclusive education through Corporate Social Responsibility (CSR) support from PT. Indobara. The target partners of this program are teachers and inclusive schools that face limitations in capacity, accessibility, and collaboration in supporting students with special needs. The program was implemented using a participatory approach through several stages, including problem identification and needs assessment with partners, program design based on partner needs, implementation through training and mentoring, and evaluation of outcomes and impacts. The results of the program indicate significant improvements in teachers' competencies in inclusive teaching practices, increased school accessibility, and strengthened collaboration between schools, PT. Indobara, and the community. These outcomes reflect measurable changes in partner capacity and the learning environment. In conclusion, this PkM activity demonstrates that CSR-based interventions can effectively support inclusive education when implemented collaboratively and sustainably. The impacts of this program include improved quality of inclusive learning, increased awareness and commitment among stakeholders, and the establishment of sustainable school industry partnerships that can be adapted and replicated in other contexts.

Keywords: community empowerment, corporate social responsibility (csr), educational access, inclusive education, multi-stakeholder collaboration,

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INTRODUCTION

Inclusive education is a fundamental approach to ensuring equal access to quality education for all learners, including those with special needs, and is increasingly recognized as a multidimensional concept encompassing vision, curriculum, pedagogy, assessment, support, resources, and leadership rather than mere physical placement in mainstream classrooms (Mitchell, 2015). This community service (PkM) activity specifically targets schools supported by the CSR program of PT. Indobara, located in South Kalimantan, Indonesia, particularly in areas surrounding the company's operational sites. These schools represent a typical context of developing regions where inclusive education policies have been introduced but not yet fully implemented at the practical level, a pattern consistent with international evidence that policy adoption does not automatically translate into consistent school-level practice ([Ainscow, 2020](#)). The partner institutions consist of primary, junior secondary, and senior secondary schools located in both urban (53.3%) and rural (46.7%) areas, with varying levels of readiness in implementing inclusive education. The program engaged 300 respondents consisting of teachers (60%), school principals (20%), and CSR program officers (20%), reflecting a multi-stakeholder context of inclusive education implementation. Most schools involved have begun implementing inclusive education, with 70% of respondents indicating prior experience. However, field observations and baseline data show that implementation remains partial, fragmented, and highly dependent on individual teacher initiative rather than institutional systems, echoing global findings that uneven institutionalization is a persistent barrier to equitable education systems ([OECD, 2019](#)).

Baseline conditions indicate that although inclusive education has been introduced, its implementation is not yet optimal. Only a portion of teachers have adequate competence in inclusive practices, as reflected in moderate baseline scores of teacher capacity ($M = 3.78$) and access to resources ($M = 3.82$). Initial conditions before intervention also show relatively low availability of accessible facilities ($M = 2.41$), adaptive learning materials ($M = 2.35$), and student support services ($M = 2.29$). In addition, participation of students with special needs ($M = 2.88$) and community involvement ($M = 2.67$) were still limited. These data demonstrate that schools face significant constraints in infrastructure, pedagogical capacity, and stakeholder collaboration, a condition that mirrors global reporting on learning poverty and unequal access to quality education particularly in low- and middle-income contexts ([World Bank, 2020](#)), thereby justifying the need for targeted CSR-based intervention in these locations.

To address these problems, a community service (Pengabdian kepada Masyarakat/PkM) program was implemented with the support of Corporate Social Responsibility (CSR) from PT Indobara. Corporate involvement of this kind reflects a broader shift in the CSR literature toward viewing business engagement with education and community welfare as a strategic and multilevel undertaking rather than a purely philanthropic gesture ([Aguinis & Glavas, 2012](#)). In developing-country contexts particularly, such CSR initiatives are often shaped by the translation and adaptation of globally circulated CSR logics into locally meaningful practices, which can determine whether interventions take root institutionally or remain superficial ([Jamali et al., 2017](#)). The intervention in this program was designed in several stages, including problem identification, program planning, implementation of teacher training workshops, provision of inclusive learning media, mentoring and assistance, as well as evaluation of program outcomes. The partner school was actively involved in all stages of the activity, ensuring participatory and sustainable implementation, consistent with stakeholder-based

approaches that emphasize the co-creation of value between corporations and the communities they engage ([Freeman, 2010](#)).

The objective of this PkM activity is to improve teacher competence in implementing inclusive education, enhance the accessibility of learning environments, and strengthen collaboration between schools, communities, and corporate partners. This multi-actor collaborative structure also reflects processes of institutional isomorphism, whereby schools operating within the same regulatory and social environment tend to adopt similar practices and structures when supported by external actors such as CSR providers ([DiMaggio & Powell, 1983](#)). The impact of this program is reflected in the increased capacity of teachers, improved availability of inclusive learning support, and the establishment of collaborative networks that support sustainable inclusive education practices, in line with global calls for non-state actors to play a more active and coordinated role in expanding educational access and quality ([UNESCO, 2022](#)).

Therefore, this article focuses on describing the stages of implementation, partner participation, evaluation results, and the tangible impacts of the PkM program in improving inclusive education practices in the partner school.

Research Questions

Based on the theoretical framework and identified research gaps, the study formulates the following research questions:

1. What forms and mechanisms characterize the implementation of CSR programs by PT Indobara in supporting inclusive education?
2. How does CSR contribute to addressing barriers related to access, participation, and learning outcomes in inclusive education?
3. To what extent and through what mechanisms does multi-stakeholder collaboration mediate the relationship between CSR initiatives and improvements in access, participation, and learning outcomes in inclusive education?

METHODS

This community service (PkM) program employed a participatory and collaborative approach involving one inclusive elementary school as the partner institution, with participants consisting of approximately 300 respondents (teachers and students), as well as parents, supported by Corporate Social Responsibility (CSR). The program was implemented at the partner inclusive elementary school over a period of 4 months, consisting of: (1) preparation (Month 1), (2) implementation (Months 2–3), and (3) evaluation (Month 4). Operationally, the program consisted of the following stages: (1) needs assessment through initial observation and interviews, (2) program planning based on identified needs, (3) implementation of training and classroom mentoring, and (4) impact evaluation using measurable instruments.

The implementation of the inclusive education program was conducted through participatory classroom activities, as illustrated in [Figure 1](#).



Figure 1. The implementation of the inclusive education program

The detailed stages are described as follows:

Problem Identification and Needs Assessment

The initial stage was conducted through direct classroom observation and discussions with the principal and teachers to identify the baseline condition of inclusive learning. The findings indicated limited teacher understanding in handling students with special needs, lack of adaptive learning media, and suboptimal parental involvement.

Program Planning

Based on the assessment results, the team designed training and mentoring programs focused on enhancing teachers' capacity in inclusive education. The program was collaboratively developed with the partner and tailored to field needs, including the preparation of training modules and provision of adaptive learning tools supported by CSR.

Program Implementation

The implementation was conducted in structured sessions, consisting of 4 main meetings:

1. Session 1: Introduction to inclusive education concepts and baseline strengthening.
2. Session 2: Training on adaptive learning strategies.
3. Session 3: Workshop on developing and using inclusive learning media.
4. Session 4: Classroom mentoring and real teaching practice.

The implementation activities included:

1. Teacher training on inclusive learning strategies.
2. Workshops on the use of adaptive learning media.
3. Direct classroom mentoring in applying inclusive teaching methods.
4. Parental involvement in supporting students' learning processes.

Evaluation and Monitoring

Evaluation was conducted at two main points: before the intervention (pre-test) and after the intervention (post-test), ensuring measurable impact assessment. Evaluation was conducted systematically using structured instruments to measure changes before and after the intervention (pre-test and post-test). The instruments and procedures are as follows:

1. Evaluation Indicators
 - a. Teachers' understanding of inclusive education concepts.
 - b. Teachers' skills in applying adaptive teaching strategies.
 - c. Use of inclusive learning media.
 - d. Student participation and engagement in learning.
 - e. Teacher–parent collaboration in supporting students.
2. Instruments and Sample Items The instruments included:
 - a. Likert-scale questionnaire (1–5) for teachers. Example item: “I am able to design learning activities that accommodate students with special needs.”
 - b. Classroom observation sheet. Example aspects: instructional differentiation, use of adaptive media, teacher–student interaction.
 - c. Semi-structured interview guidelines. Example question: “What changes have you experienced after the training in managing an inclusive classroom?”
3. Measurement Scale A 5-point Likert scale was used: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree.
4. Instrument Validation The instruments were validated through:
 - a. Expert judgment by inclusive education specialists.
 - b. Face validity testing with partner teachers.
 - c. Revision based on expert feedback.
5. Pre-test and Post-test Procedure
 - a. Pre-test was conducted before the training to determine baseline conditions.
 - b. Post-test was conducted after the completion of all activities.
 - c. Score comparisons were used to assess improvement.
6. Data Analysis and Impact Measurement
 - a. Descriptive analysis (mean scores and percentage increase).
 - b. Comparison between pre-test and post-test scores.
 - c. Data triangulation from questionnaires, observations, and interviews.
 - d. Impact was measured through score improvements, changes in teaching practices, and testimonials from teachers and students.

Evaluation was conducted continuously to ensure program effectiveness and to inform future improvements.

Impact and Sustainability

Impact measurement was operationalized through: (1) quantitative score improvement (pre-test vs post-test), (2) observed behavioral changes in teaching practices, and (3) qualitative feedback from participants. Program impact was measured both quantitatively and qualitatively based on pre-test and post-test results, observations, and interviews. Improvements were indicated by score differences before and after the intervention, changes in classroom practices, and increased student participation. Sustainability was ensured through the integration of training outcomes into routine teaching practices, provision of modules as

teacher guidelines, and commitment from the school and CSR support to continue inclusive education practices. This method emphasizes active partner involvement at every stage to ensure the program is relevant, applicable, and sustainable.

RESULTS AND DISCUSSION

This section presents the results of the community service (PkM) program aligned with the previously described methodology, namely a mixed-method approach using a pre-test and post-test design involving 300 respondents from partner schools. The analysis employed descriptive statistics, paired sample t-tests, and thematic analysis for qualitative data.

Participant Characteristics and Alignment with Research Design

The respondents consisted of teachers (60%), school principals (20%), and CSR program officers (20%), selected due to their direct involvement in program implementation. This composition aligns with the research design emphasizing multi-stakeholder participation in evaluating program impact. Most respondents (70%) had prior experience in inclusive education, ensuring that the data collected were relevant for assessing changes in capacity, access, and program implementation (see [Table 1](#)).

Table 1. Respondent characteristics (N = 300)

Variable	Category	Frequency	Percentage (%)
Respondent Type	Teacher	180	60.0
	School Principal	60	20.0
	CSR Officer	60	20.0
Gender	Male	140	46.7
	Female	160	53.3
Inclusive Experience	Yes	210	70.0
	No	90	30.0

This table indicates that respondents represent key stakeholders in inclusive education implementation.

Baseline Measurement Results (Pre-Test)

The baseline measurement was conducted using a Likert-scale instrument (1–5) covering key indicators:

- Accessibility of learning facilities
- Teacher competence in inclusive education
- Availability of adaptive learning materials
- Participation of students with special needs
- Parental and community support
- School policies supporting inclusion

Pre-test results showed mean scores ranging from 2.29 to 3.01, with an overall mean of 2.68, indicating moderate to low initial conditions, particularly in facilities, support services, and learning resources.

Post-Intervention Results (Post-Test)

Following CSR interventions, including teacher training, provision of inclusive facilities, development of adaptive materials, and strengthening collaboration, post-test measurements

were conducted using the same instrument. The results showed significant improvement, with mean scores ranging from 3.89 to 4.21 and an overall mean of 4.08 (see [Table 2](#)). This reflects substantial enhancement in school capacity and inclusive education practices.

Table 2. Pre-test and post-test comparison

Indicator	Pre-Test (Mean)	Post-Test (Mean)	Δ Change	% Increase
Accessible facilities	2.41	4.08	1.67	69.29%
Teacher competence	2.76	4.12	1.36	49.28%
Adaptive materials	2.35	3.97	1.62	68.94%
Student participation	2.88	4.16	1.28	44.44%
Parental support	3.01	4.09	1.08	35.88%
Community involvement	2.67	3.95	1.28	47.94%
Support services	2.29	3.89	1.60	69.87%
School policy	2.94	4.18	1.24	42.18%
Beneficiary satisfaction	2.83	4.21	1.38	48.76%
Implementation effectiveness	2.62	4.14	1.52	58.02%

This table demonstrates consistent improvement across all indicators after CSR program implementation.

Program Impact Analysis (Paired Sample t-test)

To evaluate program effectiveness, a paired sample t-test was conducted comparing pre-test and post-test results. All indicators showed statistically significant improvements ($p < 0.001$). Key improvements include:

1. Accessible facilities increased by 69.29%
2. Adaptive learning materials increased by 68.94%
3. Student support services increased by 69.87%
4. Teacher competence increased by 49.28%
5. Student participation increased by 44.44%

High t-values (12.87–18.72) indicate that the observed changes are statistically robust and attributable to the intervention.

Integration of Quantitative and Qualitative Findings

Quantitative findings are supported by qualitative data obtained through in-depth interviews. Thematic analysis identified three key mechanisms:

1. Teacher capacity building through training and mentoring
2. Improved access and resources via CSR-supported facilities and materials
3. Multi-stakeholder collaboration among schools, communities, and CSR providers

These findings explain that increased student participation is driven not only by physical improvements but also by pedagogical and social changes.

Qualitative Findings Table (Coding and Themes)

To strengthen the quantitative results, the following [Table 3](#) presents qualitative findings based on open, axial, and selective coding processes.

Table 3. Qualitative findings (coding and themes)

Main Theme	Subtheme	Code	Description	Respondent Quote
Inclusive Education Access	Accessible Facilities	ACC-FAC	Provision of ramps, accessible toilets, and classroom access	“Now our child can enter the classroom more easily due to wheelchair access.”
Inclusive Education Access	Financial Support	ACC-FIN	CSR funding support for students with special needs	“The company’s support helps cover school expenses.”
Teacher Capacity	Inclusive Training	CAP-TRN	Training on inclusive teaching methods	“We now better understand how to teach students with special needs.”
Teacher Capacity	Professional Mentoring	CAP-MEN	Mentoring from experts or specialists	“This mentoring helps us manage special cases in class.”
Social Change	Peer Acceptance	SOC-PEER	Increased acceptance among students	“Students are now more willing to interact with inclusive peers.”
Social Change	Community Awareness	SOC-AWARE	Increased community awareness and support	“The community now supports inclusive education more actively.”
Implementation Challenges	Resource Limitations	CHL-RES	Limited assistive tools and experts	“Assistive tools are still limited.”
Implementation Challenges	Program Consistency	CHL-CON	Inconsistent CSR program implementation	“The program is not always implemented regularly.”

This table shows that the observed changes reflect not only quantitative improvements but also social and institutional dynamics.

Linkage Between Results and Intervention Procedures

The findings are consistent with the implementation stages:

1. Needs assessment and baseline identification
2. Teacher training and mentoring
3. Provision of inclusive facilities and resources
4. Monitoring and evaluation through pre-test and post-test

Each stage contributed to improvements in the measured indicators, confirming the effectiveness of the intervention design.

DISCUSSION

The findings of this study indicate that the implementation of CSR programs by PT Indobara in supporting inclusive education (RQ1) is characterized by a combination of integrated forms and mechanisms, including teacher capacity building through training and mentoring, the provision of accessible facilities and infrastructure, and collaborative mechanisms involving schools, communities, and corporate actors. Empirically, these interventions contributed to improvements in teacher capacity, school accessibility, and learning support, as reflected in the comparison of conditions before and after the program. These findings suggest that the defining characteristics of CSR implementation lie not only in the types of interventions provided, but also in the participatory, contextual, and sustainable mechanisms through which they are delivered. This aligns with the view that inclusive education is a multidimensional concept encompassing vision, curriculum, pedagogy, support, and leadership, thus requiring comprehensive rather than partial interventions ([Mitchell, 2015](#)). It also resonates with the broader CSR literature, which frames corporate engagement as a multilevel institutional phenomenon whose effectiveness depends on how deeply it is embedded within organizational and community structures rather than treated as an isolated activity ([Aguinis & Glavas, 2012](#)). Therefore, the CSR mechanisms applied in this study demonstrate a systemic approach that enhances responsiveness to local needs and improves implementation effectiveness.

Furthermore, regarding the role of CSR in addressing barriers to access, participation, and learning outcomes (RQ2), the findings reveal that CSR interventions significantly reduce both structural and pedagogical barriers through enhanced teacher competence, improved accessibility of facilities, and strengthened learning support for students with special needs. These impacts are evident in the increased participation of students with special needs in classroom activities, as well as improvements in the quality of classroom interactions within inclusive settings. Such mechanisms not only improve physical access to education but also expand active participation and contribute to better learning outcomes. These results are consistent with international frameworks that emphasize the collaborative use of available resources and cross-sector experience-sharing to overcome learning barriers and promote equity in education systems ([Ainscow, 2020](#)), as well as with global education policy agendas that identify resource gaps and institutional capacity as central obstacles to achieving inclusive and quality education for all ([OECD, 2018](#)). Accordingly, CSR can be understood as a strategic instrument that is not merely supportive but also transformative in advancing more inclusive and equitable education systems.

In relation to the linkage between CSR initiatives and improvements in access, participation, and learning outcomes (RQ3), this study highlights that multi-stakeholder collaboration functions as a crucial mediating mechanism. The synergy between corporations, schools, and communities not only strengthens program implementation but also amplifies its impact through resource coordination, knowledge exchange, and enhanced collective commitment. In this sense, collaboration serves as a bridge that connects CSR initiatives with more optimal inclusive education outcomes. These findings are consistent with institutional perspectives suggesting that organizations operating within a shared field, such as schools supported by the same corporate partner, tend to converge toward similar structures and practices when embedded in coordinated, externally supported networks ([DiMaggio & Powell, 1983](#)). They further echo stakeholder theory's emphasis on collaborative value creation among firms, communities, and institutional partners as a foundation for sustainable social outcomes (Freeman, 2010), and align with evidence that CSR logics in developing-country settings are

most effective when translated and adapted through sustained multi-actor engagement rather than imposed as a standardized template ([Jamali et al., 2017](#)). Therefore, the effectiveness of CSR in improving inclusive education is highly dependent on the quality and intensity of stakeholder collaboration as the primary mediating mechanism.

Overall, the findings of this study confirm that a CSR-based approach can serve as an effective strategy for addressing gaps in the implementation of inclusive education, particularly in Global South contexts such as Indonesia. More importantly, the study demonstrates measurable changes among partner schools, including improved teacher capacity in implementing inclusive teaching strategies, increased availability of accessible facilities, and greater participation of students with special needs in the learning process. These changes indicate that CSR interventions are not merely conceptual but produce tangible improvements in the quality of inclusive education services, consistent with global evidence pointing to persistent learning poverty and unequal educational access in developing regions that require targeted, resource-based interventions ([World Bank, 2020](#)). However, key challenges remain in ensuring program sustainability, continuous teacher capacity development, and more systematic cross-sector policy integration, as underscored by calls for non-state actors to strengthen their coordinated and sustained contribution to education systems ([UNESCO, 2022](#); [Ainscow, 2020](#)). Therefore, this study contributes by proposing a collaborative model that is not only replicable but also capable of generating measurable and sustainable improvements in inclusive education practices.

CONCLUSION

This study concludes that CSR initiatives implemented by PT Indobara have successfully achieved the objectives of the community service program through strengthening inclusive education practices in partner schools. The program outcomes are reflected in measurable improvements, including enhanced teacher capacity in applying inclusive teaching strategies, increased accessibility of school facilities, and greater participation of students with special needs in the learning process. These achievements indicate that the CSR program has contributed directly to improving the quality of inclusive education services in collaboration with partner schools. Furthermore, multi-stakeholder collaboration among the company, schools, and the community has played a critical role in mediating and amplifying these impacts through coordinated actions, shared resources, and sustained engagement. Therefore, the implementation of CSR-based community service not only addresses existing barriers in inclusive education but also produces tangible and sustainable outcomes for partner institutions. Nevertheless, ensuring the continuity of these achievements requires ongoing capacity development, stronger institutional support, and long-term collaborative commitment among stakeholders. Building on these findings, this study suggests several practical implications for future community service and CSR-based initiatives in inclusive education. First, sustained teacher professional development should be prioritized to ensure long-term improvement in inclusive teaching practices. Second, continuous investment in accessible infrastructure and learning resources is essential to maintain and expand the gains achieved through the program. Third, strengthening institutional collaboration through formal partnerships between companies, schools, and local governments can enhance program sustainability and scalability. Finally, future initiatives should incorporate systematic monitoring and evaluation mechanisms to capture longitudinal impacts and inform evidence-

based policy and practice. These recommendations aim to reinforce the effectiveness of CSR-driven inclusive education programs and support their replication in similar contexts.

CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest.

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